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the front and rear jaws are proximate each other to compress the at least two thermoplastic films together, the rear jaw having a resilient portion facing the front jaw, the resilient portion having a given cross-sectional thickness; and

a heating element positioned between the insertion zone and the front jaw, the heating element having a cross-sectional thickness no less than about 0.55 times the cross-sectional thickness of the resilient portion.

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45. (Amended) The device of claim 42 wherein the heating element is at least partially embedded in the front jaw when the front and rear jaws are in the open position.

REMARKS

Applicant respectfully requests reconsideration of the above-identified application. Claims 1-48 remain in this application. Claims 4, 21-22, 27, 35, 41-42, and 45 are amended to more particularly point out and distinctly claim the subject matter that Applicants regards as their invention.

Attached is a marked-up version of the changes made to the claims by the current amendment. The attachment is captioned "Version with Markings to Show Changes Made."

I. Specification

The specification has been amended, as noted above, to correct some misspellings.

II. Allowable Subject Matter

Applicants note with appreciation: i) the allowance of claims 1-3 and 5-20; ii) the statement that claims 27-29 and 35-37 were merely objected to as depending from a rejected claims but would be allowable if rewritten; and iii) the statements that claims 4 and 21 would be allowable if rewritten to overcome the §112 rejection noted below. Accordingly, claims 27 and 35 have been rewritten in independent form incorporating all of the limitations of the base and intervening claims, as suggested by the Examiner. Allowable claims 28-29 depend from the rewritten independent claim 27 and claims 36-37 depend from rewritten independent claim 35. Also, claims 4 and 21 have been rewritten to overcome the §112 rejection, as discussed below.

III. Non-Art Rejections

Applicants have rewritten claims 4, 21, 41, and 45 to overcome the indefiniteness rejection under 35 U.S.C. § 112, second paragraph. Support for these amendments may be found at least at page 9, lines 4-10.

IV. Rejection Based on Bergevin and Soodak

As originally presented, claims 22-25, 30-31, and 42-48 were rejected under 35 U.S.C. § 103(a) as obvious in view of U.S. Patent 4,981,546 to Bergevin combined with U.S. Patent 5,474,637 to Soodak. Also, dependent claims 26 and 32 were rejected under 35 U.S.C. § 103(a) as obvious in view of the combination of Bergevin and Soodak further combined with The Wiley Encyclopedia of Packaging Technology, "Sealing, Heat", John Wiley & Sons, 1986, Pages 574-578 ("Wiley").

Applicants have amended independent claims 22 and 42 to recite a device for *simultaneously heat sealing and severing* at least two thermoplastic films. Support for these amendments may be found at least at page 1, line 6 of the present application. Applicants respectfully traverse this rejection as conceivably applied to these amended claims.

Bergevin is directed to a device for simultaneously sealing and severing at least two thermoplastic films. (Column 2, lines 30-32.)

Soodak is directed to a device for sealing a pouch – but fails to teach or suggest anything with respect to a device for simultaneously sealing *and severing* two thermoplastic films. To the contrary, the Soodak heat-sealing device is designed to seal *without* severing.

The Soodak heat-sealing device forms a peelably sealed pouch having "generous flaps which may be held in the hands and pulled apart. When this is done, the pouch peels open, revealing its contents in a manner such that they may be removed without any additional contact with the exterior surfaces of the pouch." (Column 1, lines 25-31.) The peel flaps are "formed from excess lengths of the back and the front films extend[ing] outward from the pouch." (Column 1, lines 45-46.)

More particularly, the Soodak heat-sealing device presses the top and bottom films together to form seals 12, 14, and 16. (Column 6, lines 27-34, Figures 1-2.) After a

transplant organ 24 is placed in the pouch 10, the Soodak heat-sealing device is used to form bottom seal 26. (Column 6, lines 37-40, Figures 1-2.) Peel flaps 22 extend from the seal 16 that was formed by the Soodak heat-seal device. (Column 6, lines 35-36.)

Nowhere does Soodak disclose or suggest that the Soodak heat-sealing device severs the top and bottom films. The Soodak heat-sealing device forms a pouch seal (e.g., seal 16) having peel flaps (e.g., flaps 22) *extending* from the seal, as discussed above (*see* Fig. 1). If the Soodak heat-sealing device also severed the top and bottom films forming the pouch, it would cut off the peel flaps – a result clearly contrary to Soodak’s teachings. Further, as shown in Fig. 5, the heated bar 28 of the Soodak heat-sealing device has a relatively wide, flat surface opposite the curved, relatively small surface of the silicone cord 38. Such an arrangement is not designed to sever the top and bottom films while sealing the films together.

Thus, Applicants respectfully submit that a *prima facie* case of obviousness has not been established for the amended claims because the prior art fails to suggest the desirability of combining Soodak with Bergevin. The mere fact that Soodak *could* be combined with Bergevin does not render the resultant combination obvious; the prior art must provide the teaching or suggestion supporting the combination. MPEP 2143.01. Nothing in Soodak or Bergevin suggests substituting the seal bar 28 and silicone cord 38 of Soodak for the sealing element 16 and silicone rubber pad 19 of Bergevin – because to do so would eliminate the severing function of the Bergevin sealing/severing device. Thus, the motivation to combine these references to form a *prima facie* obviousness case is lacking because the proposed combination would render the Bergevin sealing/severing device unsatisfactory for its intended use. *See* MPEP §2143.01.

The Wiley reference was cited with respect to the dependent concepts of claims 26 and 32, and fails to supplement the shortcomings noted above.

The dependent claims include additional recitations and are therefore further patentable over the combination of Bergevin, Soodak, and Wiley.

V. Rejection Based on Bergevin and Wiley

Claims 33-34 and 38-41 were rejected under 35 U.S.C. § 103(a) as obvious in

view of Bergevin combined with Wiley. Applicants respectfully traverse this rejection.

Bergevin is directed to a device for simultaneously sealing and severing at least two thermoplastic films. (Column 2, lines 30-32.) As pointed out on page 6 of the Office Action mailed August 1, 2001, Bergevin fails to teach an unreinforced release material.

Wiley was cited to supplement the failure of Bergevin to disclose an unreinforced release material. However, the Wiley reference also fails to disclose an unreinforced release material. The previous Office Action refers to the Teflon-coating polyimide as an unreinforced material. However, the Teflon-coated polyimide film of Wiley is a *reinforced* release film – the polyimide (Kapton) substrate film reinforcing the Teflon (PTFE) coating, which provides the release properties. Thus, the proposed combination does not render the claimed invention obvious because the combination fails to teach or suggest all of the claim recitations. MPEP §2143.03.

The dependent claims include additional recitations and are therefore further patentable over the combination of Bergevin and Wiley.

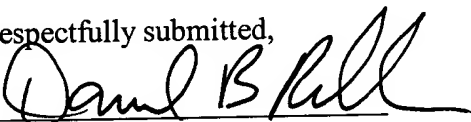
VI. Conclusion

In view of the above amendments and these remarks, it is respectfully submitted that the present application is in condition for allowance. A notice to that effect is earnestly and respectfully requested.

Date: December 3, 2001

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ATTACHMENT

Version with Markings to Show Changes Made

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In the Specification:

The paragraph beginning at page 9, line 4 has been amended as follows:

Heating element 52 is positioned between front jaw release sheet 66 and front jaw 42. Heating element 52 may be embedded ~~imbedded~~ in front jaw 42 (Fig. 6), adjacent the surface of front jaw 42 (e.g., adjacent insulating layer 50 of Figs. 3-5), or spaced apart from front jaw 42 when device 42 is in the open position (not shown). The embodiment having an embedded ~~imbedded~~ heating element (Fig. 6) provides the advantages of retaining the heating element 52 in a more fixed position relative to the front jaw 42 and lowering the cross-sectional profile of heating element 52.

In the Claims:

Claims 4, 21-22, 27, 35, 41-42, and 45 have been amended as follows:

4. (Amended) The device of claim 1 wherein the heating element is at least partially embedded in the front rear jaw when the front and rear jaws are in the open position.

21. (Amended) The device of claim 9 wherein the heating element is at least partially embedded in the front rear jaw when the front and rear jaws are in the open position.

22. (Amended) A device for simultaneously heat sealing and severing at least two thermoplastic films ~~together~~, the device comprising:

front and rear opposing jaws moveable between an open position defining a zone for inserting the at least two films between the front and rear jaws and a closed position in which the front and rear jaws are proximate each other, the rear jaw including a resilient portion facing the front jaw, the resilient portion having a given cross-sectional thickness;

a front jaw release sheet positioned between the insertion zone and the front jaw when the front and rear jaws are in the open position; and

a heating element positioned between the front jaw release sheet and the front jaw, the heating element having a cross-sectional thickness no less than about 0.55 times the cross-sectional thickness of the resilient portion.

27. (Amended) A device for heat sealing at least two thermoplastic films together, the device comprising: The device of claim 22 further comprising

front and rear opposing jaws moveable between an open position defining a zone for inserting the at least two films between the front and rear jaws and a closed position in which the front and rear jaws are proximate each other, the rear jaw including a resilient portion facing the front jaw, the resilient portion having a given cross-sectional thickness;

a front jaw release sheet positioned between the insertion zone and the front jaw when the front and rear jaws are in the open position;

a heating element positioned between the front jaw release sheet and the front jaw, the heating element having a cross-sectional thickness no less than about 0.55 times the cross-sectional thickness of the resilient portion; and

at least one spacer attached to the front jaw release sheet, wherein the front jaw release sheet is disengaged from the heating element when the front and rear jaws are in the open position.

35. (Amended) A device for heat sealing at least two thermoplastic films together, the device comprising: The device of claim 33 further comprising

front and rear opposing jaws moveable between an open position defining a zone for inserting the at least two films between the front and rear jaws and a closed position in which

the front and rear jaws are proximate each other to compress the at least two thermoplastic films together, the rear jaw including a resilient portion facing the front jaw;

a front jaw release sheet positioned between the insertion zone and the front jaw when the front and rear jaws are in the open position, the front jaw release sheet including an unreinforced release material;

a heating element positioned between the front jaw release sheet and the front jaw;

and

at least one spacer attached to the front jaw release sheet, wherein the front jaw release sheet is disengaged from the heating element when the front and rear jaws are in the open position.

41. (Amended) The device of claim 33 wherein the heating element is at least partially embedded in the front rear jaw when the front and rear jaws are in the open position.

42. (Amended) A device for simultaneously heat sealing and severing at least two thermoplastic films together, the device comprising:

front and rear opposing jaws moveable between an open position defining a zone for inserting the at least two films between the front and rear jaws and a closed position in which the front and rear jaws are proximate each other to compress the at least two thermoplastic films together, the rear jaw having a resilient portion facing the front jaw, the resilient portion having a given cross-sectional thickness; and

a heating element positioned between the insertion zone and the front jaw, the heating element having a cross-sectional thickness no less than about 0.55 times the cross-sectional thickness of the resilient portion.

45. (Amended) The device of claim 42 wherein the heating element is at least partially embedded in the front rear jaw when the front and rear jaws are in the open position.